

United States Application No. 09/611,447  
Amdt. dated June 20, 2005  
Reply to Office Action dated March 21, 2005

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### REMARKS

In the Office Action the Examiner has rejected "Claims 1-10, 16, 18-20, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fatehi et al. (US 6,600,583 B1), hereinafter referred to as Fatehi, in view of Jamoussi (Internet Draft, "Constraint-Based LSP Setup Using LDP)".

The Applicant respectfully submits that the subject matter claimed in claims 1-10, 16, 18-20, 22, and 23 patentably distinguishes over the cited prior art references as discussed below.

The present invention relates to optical label switching routers and networks and to a method of optical network bandwidth representation for such networks. Multi-Protocol Label Switching (MPLS) is well known in the art and is discussed in the background section of the present application starting on page 3. In the Office Action the Examiner states that the Fatehi reference discloses a method which includes assigning an optical label to a channel group, said channel group using one of said fiber optic links and comprising a plurality of channels citing Figure 13 and Col 8, lines 54-63. With respect, the Fatehi reference, and certainly the cited passages therein, simply does not discuss, disclose or even suggest anything of the sort.

It should be noted that the wavelength update message discussed in the cited passage relates to an optical tag in the Fatehi reference and not a label. Such a tag is defined in the Fatehi reference:

"In accordance with the present invention, we utilize an "optical message tag" on *the* carrier wavelength which includes packet destination information associated with *a group of packets which are carried on a wavelength*. Optical tagging is described in U.S. Pat. No. 5,745,274, issued to M. T. Fatehi et al on Apr. 28, 1998, which is incorporated by reference herein. In that patent, optical tags are formed by modulating individual optical carriers (e.g., lasers) with a unique identifier signal (i.e., frequency tones) that can be readily read, modified or written. While this patent describes the use of a frequency tone as a subcarrier for carrying

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message tags, under certain conditions, one could modulate the message tags directly on the envelopes of the data carrying wavelengths without using subcarrier tone frequencies. The optical message tags are modulated with various types of maintenance information which can be monitored by at any point along the network.

In accordance with the present invention, optical tagging is associated with a group of packets and used for signaling between routers for controlling the routing of that group of packets over an optical network of FIG. 1. The super-imposed "tag" can be removed in the optical domain (in a process called untagging) without conversion of the signal carried within the wavelength to electronics. More importantly, a new tag can be generated in the optical domain and applied at the intermediate routers/cross-connects without conversion to electronics. Thus, since the observation and control of packet channels is performed in optics rather than electronics, it is accomplished with reduced delay and at a decreased cost. Consequently in our network, conversion of the optical signal to an electronic signal is avoided. (Emphasis added) (Col 4, lines 1-33)".

Furthermore it can be seen by the emphasized portioned that a tag is in no way a label and furthermore certainly not a label assigned to a channel group comprising a plurality of channels as the tag is assigned to a wavelength.

Regarding the discussion of the next claim element at the bottom of page 2 to the top of page 3 of the Official Action, once again, the Fatehi reference, and certainly the cited passages therein, simply does not discuss, disclose or even suggest the claimed element. In particular, Fatehi certainly does not discuss having a label with an indication of a channel available for use in a label switched path. Accordingly the Fatehi reference, even if combinable with the Jamoussi reference simply fails to teach or suggest the claimed invention. As such the rejection fails to establish a prima facie case.

For the Patent Office to combine references in an obviousness analysis, the Patent Office must do two things. First, the Patent Office must articulate a motivation to combine the references, and second, the Patent Office must support the articulated motivation with actual

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evidence. *In re Dembiczak*, 175 F.3d 994,999 (Fed. Cir. 1999). While the range of sources for the motivation is broad, the range of available sources does not diminish the requirement for actual evidence. *Id.* Once the Patent Office has properly combined the references, to establish *prima facie* obviousness, the Patent Office must still show where each and every claim element is shown. MPEP §2143.03.

The Fatehi reference solves a different problem and works in a completely different manner than the present invention. The Fatehi reference is directed to an optical Internet router which minimizes conversion from optical to electrical signals: "In an all-optical internet (OI), signal conversion from optics to electronics should be avoided if possible, and if absolutely necessary it should take place in as few points as possible." (background, col 1, lines 11-14)

The Jamoussi reference teaches a method of Constraint Based Routing (CR-MPLS). It is not related to an all-optical network as described in Fatehi. Nor is Fatehi at all related to MPLS. Accordingly it is submitted that the grounds for combining Fatehi with Jamoussi as discussed on page 3 of the Official Action is simply not supported.

Thus the rejection is improper for two reasons.

1) fails to establish a *prima facie* case:

- as it fails to show any evidence for motivation to combine;
- as the cited references are non analogous, from different fields, and offer different solutions to different problems, we submit that there is no reason to combine;

2) even if proper to combine (which is denied), the combination fails to teach each and every limitation.

Similar arguments apply for the remaining claims. Accordingly, withdrawal of the rejection and allowance of the application is solicited.

Notwithstanding the generality of the foregoing neither reference whether considered alone or together discloses the further elements of claims 6, 7, and 8. The Official Action is actually silent with respect to claim 6. Regarding the rejection to claim 7, with respect, Figure 13 of the Fatehi reference simply does not teach an indication of a service type of a second

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network. Nor does it teach an indication of a control protocol of said second network as stated in the rejection of claim 8.

Accordingly it is submitted that the rejections are improper and should be withdrawn and the case is ready for allowance.

The Commissioner is hereby authorized to charge any additional fees, and credit any over payments to Deposit Account No. 501593, in the name of Borden Ladner Gervais LLP.

Respectfully submitted,

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